February 2007

Progress report on BPA's efficiency initiatives

Background: setting long-term objectives

As the new century unfolded, a series of devastating events had profound impacts on the Bonneville Power Administration and its customers. Together, these events dictated a need for change.

In 2000-2001 an imbalance in energy supply and demand on the West Coast helped trigger an energy crisis. Electricity prices spiked in hubs across the West leading to significant rate increases in many Western states, including those in the Pacific Northwest. At the same time, the Columbia River Basin experienced a near-record, low-water year in 2000, followed by five more years of below-average water.

Together these events dramatically affected BPA's costs and rates. During the energy crisis, our customers placed 3,000 average megawatts of new load requirements on us beyond the federal system output. We bought down some of that load and augmented the rest through purchases in what was then a hugely expensive and volatile market. During that time, BPA lost $700 million, and we were forced to implement a 46 percent power rate increase.

The rate increase hit the region hard, particularly as the nation was experiencing a recession, and two Northwest states – Oregon and Washington – had the highest unemployment in the nation. This triggered a crisis in confidence in BPA and a call for closer scrutiny. Not only were customers concerned about our costs, but so too were BPA leaders and our employees. At the request of the administrator, an employee team conducted an in-depth "Lesson's Learned" review. While acknowledging the twin effects of the power crisis and low water, many asked if BPA couldn't have positioned itself better for the challenges we faced.

Our answer was yes.

BPA takes a long-term strategic focus

By 2003, with the impacts of the West Coast energy crisis receding, the time was ripe for turning things around, rebuilding confidence in BPA and taking steps to look at the long term to prevent repeating the short-term crises. In spring of 2004, we published our new long-term Strategic Direction. As part of this direction, we adopted 24 agencywide strategic objectives that are key to realizing our long-term vision to ensure reliability, maintain low rates, provide responsible environmental stewardship and be accountable to the region.

While acknowledging the twin effects of the power crisis and low water, many asked if BPA couldn't have positioned itself better for the challenges we faced.

To help us develop a long-term strategy, we adopted a set of tools commonly used by Fortune 500 companies. This approach, called the Balanced Scorecard, describes business strategy from four perspectives: 1) stakeholder value, 2) financial performance, 3) internal operations and 4) people and culture.

This report focuses on two closely related strategic objectives aimed at restoring not just customer confidence but the entire region's confidence. These objectives are listed below. (I1 and I2 refer to the first two objectives under internal operations.)

I1: Effective cost management (with an emphasis on best practices, innovation and simplicity) through our systems and processes.

I2: One BPA consistent with Standards of Conduct.

The first objective is aimed at ensuring our systems and processes are highly efficient and effective at achieving results. In addition to improving our systems and processes, we also sought to ensure these systems and processes were documented and replicable. This is particularly important given the fact that we have an aging work force with about 25 percent of our current staff eligible to retire in 2008 and 36 percent by 2010. Those expected to retire are among our most experienced employees with the greatest institutional knowledge. We needed processes in place so new people coming in behind retirees can ensure BPA continues its critical functions seamlessly.

The second objective reflects our intent to provide an organizational structure that is best suited to serving our customers and stakeholders today. A 1996 separation of our power and transmission functions was proving unwieldy and no longer suited for the realities of today's marketplace. A Federal Energy Regulatory Commission order had required utilities to separate transmission and power marketing functions to comply with the Energy Policy Act of 1992. The act mandated nondiscriminatory access to transmission to spur marketplace competition and lower electricity prices.

As a result of this national direction, there was an expectation by the mid-1990s that BPA would divide into two distinct agencies, one for transmission and the other for power. As a result, we went beyond FERC requirements to separate our functions. However, a changing regulatory climate and market eventually made two separate BPAs unlikely. To meet the needs of the current marketplace, BPA adopted another important agencywide strategic objective under internal operations – I2: One BPA consistent with Standards of Conduct.

Moving to "One BPA" was not about returning to the old BPA but about moving forward to better deliver services by eliminating redundancies and barriers to efficiency and effectiveness while fully meeting FERC's Standards of Conduct.

The goals of the two strategic objectives included:

- Continued open nondiscriminatory access to transmission
- Streamlined internal systems and processes to increase cost efficiency and improve effectiveness
- Improved internal and external communications
- Simplified customer interactions
- More efficient use of capital funding across the agency
- More integrated policy decision-making processes
- Improved succession planning

Action: pursuing greater efficiency

In September 2003, the BPA administrator sent a letter to the agency's customers committing to:

- Aggressively pursue and implement process improvement
- Use outside expertise to define opportunities for improvement
- Provide customers with a prominent role in defining scope and contractor selection related to this effort
- Work with customers to develop a work plan to secure improvements recommended by the study
- Provide regular updates

After considering 21 firms, BPA competitively selected the contractor KEMA to do a high-level comprehensive review of our major processes. Customer representatives participated in selecting the finalist. KEMA's charge was to identify opportunities for increasing efficiency and effectiveness and to deliver a "roadmap" for more detailed review and specific improvement.

After reviewing 70 functional areas across BPA, KEMA identified the top 23 areas where significant efficiencies could be captured and/or effectiveness increased. At the time, KEMA called out two broad areas that impeded BPA's efficiency. One was the fact that our organizational structure (two highly segregated business lines) did not fit the current

business environment. The other was the fact that, while we focused on results, we needed to shore up the systems and processes used to achieve those results.

Subsequently, in another competitive selection process, we selected KEMA to help us address the challenges that had been identified. This was the birth of the Enterprise Process Improvement Program, better known as EPIP.

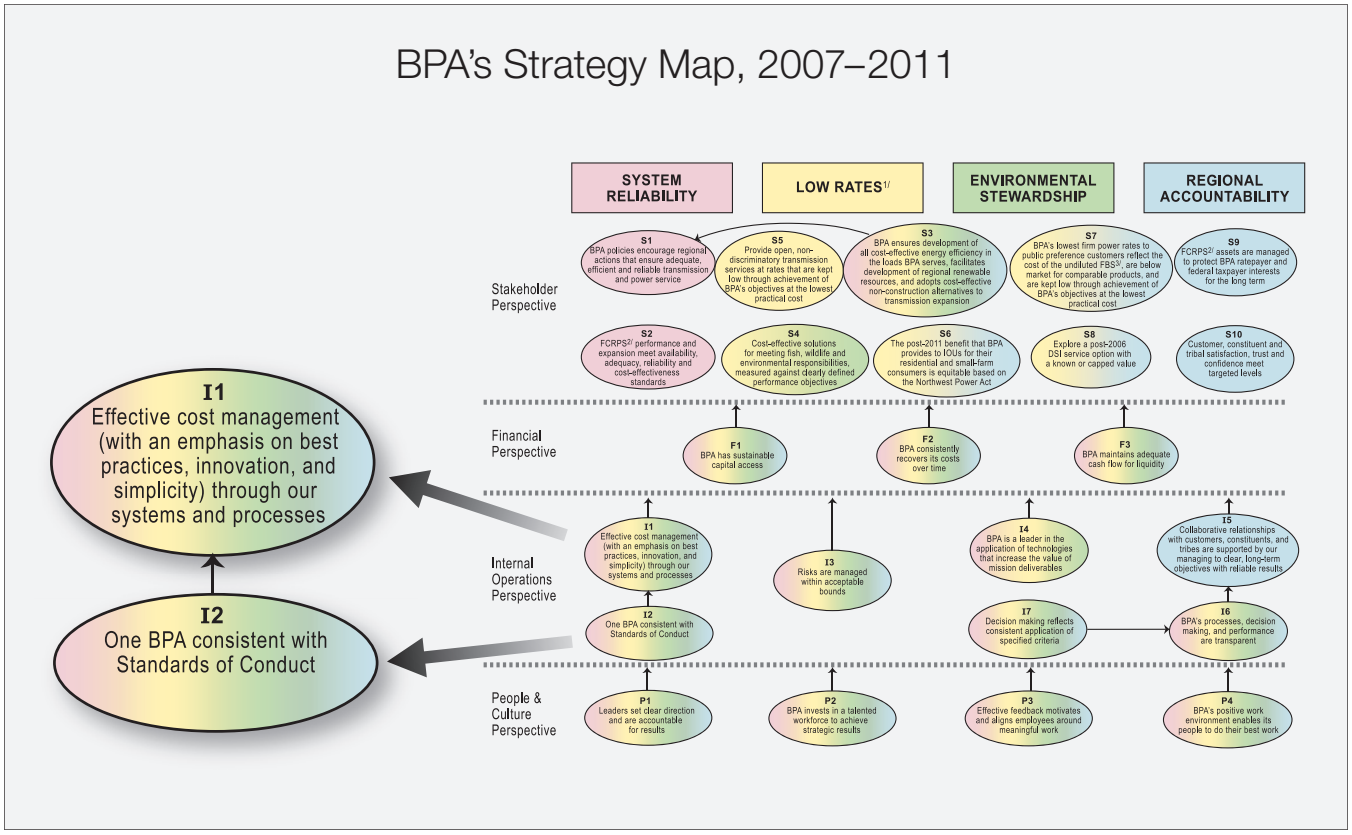
EPIP is rolled out

To implement maximum efficiency, we realized we needed to reinvent key business processes in ways that would reduce our costs and increase effectiveness and efficiencies. This meant: 1) refining and standardizing processes to eliminate redundancies and inefficiencies; 2) documenting processes so they could be replicated and continuously improved; and 3) consolidating and reducing staff in targeted areas.

The goal was to identify and implement those efficiencies and savings that made business sense as opposed to across-the-board budget reductions that do not take business needs into consideration. In terms of scope, magnitude and impact, EPIP is the largest efficiency initiative ever undertaken by BPA. As many as 600 of our employees have been or are now involved in EPIP's functional review teams.

Although EPIP has multiple goals, all were designed to achieve the two strategic objectives discussed earlier. Specific goals were to:

- Perform more efficiently
- Provide greater value without increased costs
- Ensure repeatable processes and capture of knowledge
- Reduce risks and errors
- Clarify roles and responsibilities
- Reduce costs while maintaining or enhancing performance
- Take measures to restore regional confidence



EPIP itself is not a goal but, rather, a tool to achieve the two strategic objectives aimed at attaining operational excellence. It is a significant multi-year effort and investment designed to produce benefits that will continue to provide value well into the future.

As part of EPIP, we focused on nine key areas for comprehensive functional reviews to be conducted with KEMA's expertise. We selected the nine functions that had the greatest potential for cultural and financial impacts on our operations. We recognized that the financial efficiencies we are seeking can be fully achieved only if we simultaneously adopt a culture that aligns our work around more efficient, standardized systems and processes. The nine functions are listed below.

- Asset Management
- Energy Efficiency
- Human Resources
- Information Technology
- Marketing and Sales
- Public Affairs
- Supply Chain Services
- Transmission Operations and Maintenance
- Transmission Plan, Design, Build

Each function either has gone through or is going through a rigorous assessment that calls for identifying the current state, benchmarking to identify best practices, designing a desired future state and conducting gap analysis to determine what changes we need to make to go from current state to desired future state.

The EPIP initiative is especially notable for its inclusion of outside expertise. We responded to our customers' recommendation not to "go it alone." The use of outside consultants has turned out to be a rewarding investment enabling major change and results over a relatively short time frame. The consultants brought a disciplined approach to process reviews and provided insight into best practices and project management skills.

The functional reviews focused in particular on identifying and documenting processes so that they could be improved and replicated. This was a critical element because of our aging work force. Incoming staff filling important assignments must be able to transition smoothly into the work without having to reinvent the wheel and without the mentorship of subject matter experts with decades of experience.

Each of the nine functional reviews is in a different stage, depending on the complexity involved. Public Affairs and Energy Efficiency, for example, are largely completed and are well on the way to achieving the performance improvements needed to realize the desired "future state." That is not to say that they are finished. Continuous improvement is an important theme of the efficiency initiatives.

See Appendix A for a summary and status report on the nine functional reviews.

One BPA: achieving an optimal organization

As the functional reviews proceeded and teams began implementing changes, we realized our organizational structure would need to change if it was to support and sustain the new efficiencies. In its original overview report, KEMA had said that BPA's distinct bifurcation into two business lines was not optimal for today's marketplace. It was cumbersome and inefficient, and it impeded cross-agency communication. As a result, in early 2006 we rolled out a major initiative called Change Initiatives, Organization and Governance, or COG for short.

The EPIP work had identified a number of opportunities to improve the organization. Substantial reorganization also was needed to eliminate redundancies created by the previous extreme separation of BPA into business lines. The Change Initiatives, Organization and Governance effort helped BPA reconfigure itself as "One BPA" in a way that still fully meets FERC's Standards of Conduct.

We realized that reorganization had to be more than superficial change. It needed to ensure that the agency's business operations structure would optimally support the initiatives being forged by the

EPIP teams. The Change Initiatives, Organization and Governance team was charged with developing an appropriate organizational structure; defining a set of governing bodies, principles and practices; and identifying behaviors and norms (values) to ensure BPA successfully realizes its strategic objectives.

Our new organizational structure went into place on Oct. 1, 2006.

Functions are assigned

The new organizational structure is divided into two major functions:

- Policy and governance functions reporting to the deputy administrator
- Internal/external operations reporting to the chief operating officer (COO)

BPA's senior officers (administrator, deputy administrator, COO) are now responsible for major policy decisions, ensuring an aligned "One BPA" view. More agency areas were combined into shared functions to improve communications and reduce redundancies. Shared functions now support all of Power Services, Transmission Services and Corporate.

In one sense, that makes our Corporate organization look bigger, but the net effect does not represent an increase in BPA staffing. As an example, previously, Information Technology services existed within Power, Transmission, Fish and Wildlife, and Corporate units – not an ideal situation from the standpoint of efficiency and effectiveness. The same was true of our Public Affairs functions. Both of these functions – Information Technology and Public Affairs – are now each consolidated into single functional units that take a cross-agency view.

As we re-engineer our operations, we are taking great care to filter all changes through FERC's Standards of Conduct to ensure BPA remains in full compliance.

The restructuring also created some new offices relevant to today's market and regulatory climate. For example, a new office of Planning and Governance was created that includes the pre-existing Strategic Planning, Security and Industry Restructuring functions as well as a new Regulatory Affairs and Compliance function. This will assure the agency has systems and processes in place to ensure compliance with the increasing regulations that are applicable to BPA, including those from the Federal Energy Regulatory Commission, Department of Energy and the Office of Management and Budget.

Other functions were combined under a larger umbrella to facilitate better communications and more cohesive support systems. For example, Internal Business Services was set up to encompass Human Resources, Safety, Equal Employment Opportunity, Supply Chain, Information Technology and Workplace Services.

Benefits: accruing in a variety of ways

The bottom line for most stakeholders and many employees will be "how much does this cost and how much does this save?"

We expect that the benefits of our efficiency initiatives will accumulate up to 2011 and then stabilize as the agency reaches a highly efficient end state. However, such an end state means a focus on continuous improvement, so benefits are likely to continue into the longer term.

A single dollar figure is not possible to name now and, to be perfectly candid, may never be possible to pinpoint. We expect the eventual savings will be in the tens of millions of dollars per year. These savings will evolve over years and from many directions – both from reduced spending and from more value produced without increased spending.

Over the past three-and-a-half years, we have spent just under $11 million on consulting services from KEMA, but we have already realized savings well beyond this investment. (Some preliminary savings are identified in Appendix A, which discusses the individual functional reviews.) Some financial benefits will accrue through direct cost and FTE reductions that result in budget reductions. For example, since 2002, our federal and contractor staff has declined by 9 percent.

Other significant financial benefits will include avoided costs, representing costs that would have been incurred under current-state processes that will not be incurred in the future. Benefits won't always

manifest themselves in dollar savings as some benefits will be in the form of increased value. In some cases, functions will result in the same output but at lower cost. In other cases, the costs may be the same, but the output will be greater. Benefits also will derive from reinvested savings; that is, additional work performed without additional budget. The goal is to spend "smarter" so that BPA and the region get the best value for the dollars expended.

The future: continuing to improve

Two words describe BPA's intention for its future: continuous improvement. We are moving forward to complete all nine EPIP projects and expect to continue refinements even after the EPIP teams are no longer in place. Other areas of BPA may be considered for similar reviews. We are learning how to conduct process improvement and believe these lessons are transferable to other areas of the agency. We will integrate what we have learned about conducting business processes into our daily work throughout the agency. We also will continue benchmarking to ensure we keep up with industry "best practices."

BPA's customers have been extremely helpful in the EPIP initiative. We will continue to work with the region to ensure transparency in our processes and decision making and to ensure appropriate opportunities for engagement.

Finally, our employees deserve great credit for their commitment to excellence and continued improvement. We recognize that the intensive and aggressive change has created additional pressures for our employees. Their continued flexibility and commitment to public service have been key in helping us achieve our objectives so that we can bring the region greater value.

Appendix A
Individual project summaries for Enterprise Process Improvement Program

The summaries below provide a picture of the goals, work and progress of each of the nine functional reviews conducted under the Enterprise Process Improvement Program (EPIP). They are listed alphabetically. Depending on their complexity, the projects are in various stages of maturity as they move from "current state" to "future state."

Asset Management

Efficient management of assets is particularly critical because of the huge value of the assets BPA manages or helps manage – the assets of the Federal Columbia River Power System (FCRPS). These assets include power generation, transmission, fish and wildlife programs, information technology, energy efficiency and non-electric physical structures. Asset management is a rigorous and systematic process in which asset condition, performance, risks and lifecycle costs drive decisions on maintenance, operations and investments. BPA's vision calls for a holistic, across-the-organization approach to asset-related decisions that ensures limited resources are used optimally.

Traditionally, asset data has been collected and managed in a variety of ways throughout BPA leading to ad hoc methods with little commonality. These methods ranged from stand-alone spreadsheets to agencywide enterprise-type platforms. Transmission Services alone has had more than 50 different applications or databases. These systems aren't always compatible, often have duplicative and/or inconsistent data and require different skills to use.

To address these problems, a multiyear effort is under way to:

- Improve the quality and accessibility of information on asset condition, cost and performance for operations and maintenance, investment planning and management purposes.
- Improve asset management planning to ensure that asset-related decisions advance the agency's strategic goals, meet the long-term needs of stakeholders, and optimize capital and operations and maintenance spending over time. An asset management strategy will be developed and reflected in spending plans for future rates. Cost, performance and condition targets will be established and managed for FCRPS assets.
- Further improve the valuation of capital investments and the process by which new investments are approved, funded and tracked.

Energy Efficiency

The Energy Efficiency team set out to enable BPA to continue its work to build a more sustainable environment as the premier provider and facilitator of electric energy savings and demand-side management. In addition to providing services, Energy Efficiency has a major education function to promote energy efficiency in the Pacific Northwest. The EPIP team put everything on the table including the organizational structure, FTE, budget levels, savings targets, programs, contract types and contract processes.

This was one of the first areas to implement EPIP initiatives. In 2005, Energy Efficiency reorganized, transitioning from a matrix to a functional line organization. Decision making has been moved down into the organization, and Energy Efficiency representatives have new authority to approve specific levels of funding requests. Roles for legal and public affairs support were specifically defined and assigned.

The EPIP review highlighted the need for standardized contracts, forms, terms, conditions and processes, and this work has been completed. Energy Efficiency also has established Web-based contract processing and is working to reduce the average time required to put contracts in place. The group also has established consistent savings estimates for measures under the Conservation Rate Credit and for Conservation Acquisition Agreements and has

completed standard criteria for new program development. The first annual plan for demand-side management technologies was developed in fiscal year 2005 and updated in fiscal year 2006.

Energy Efficiency has substantially reduced out-of-region programs for the Federal Reimbursable Program and expects to finish all remaining such work by the end of fiscal year 2008. It is now focusing its federal work on in-region megawatts. Energy Efficiency also is conducting a review of its engineering staff as out-of-region reimbursable work phases out. Support is being redirected to post-2006 program implementation to help BPA attain conservation targets that are 30 percent higher.

Energy Efficiency also is collaborating with Public Affairs to partner in educational programs. A closer partnership also has been set up with the Marketing and Sales organization to facilitate coordinated decision making. Overall, Energy Efficiency has defined and clarified the roles and responsibilities of account executives, energy efficiency representatives and contracting officers. The need for duplicate approvals has been eliminated.

Looking to the future, the Energy Efficiency EPIP team will address the growing workload as demand for BPA technical support increases, more oversight and utility coordination is needed and more resources are required to ensure regional coordination.

Human Resources

Human Resources is an especially important component of EPIP because a highly capable, diverse, motivated and aligned work force will facilitate BPA's success in all other areas.

The Human Resources Study recommendations focused on a new direction and identified the following four major themes for future human capital management.

- Business and people-strategy focused: Human capital management partners with executive leadership and business units to develop human capital strategies that align with the agency's goals and objectives.
- Process centric and results oriented: Processes and systems are simple, straightforward, effective and efficient, and they deliver on clear objectives.
- Highly automated: Automated business systems enable managers and employees to easily secure consistent human capital management information and make business and personnel decisions quickly and independently.
- Operationally excellent: The organization is lean and effective. It measures and tracks performance and has mechanisms for feedback. Its staff operates as a team that values continuous improvement.

As the Human Resources team began work, it determined that BPA's Human Resource costs per capita were higher than the industry average and the ratio of Human Resource employees to overall staff was higher than for other federal agencies. Eight processes and six functional areas were identified for detailed analysis based on cost-saving potential, impact to number of users and opportunities for efficiencies. The EPIP team identified 27 initiatives to eliminate redundant, lower-value process steps, reduce overall customization and achieve a 36 percent cost savings by September 2008.

Specific initiatives include redefining and implementing the Human Resources Service Delivery Model, which will employ automation and knowledge management to deliver Human Resources services more effectively and efficiently. Other areas under review for strategic alignment and efficiency are policy, position management, recruiting, hiring, performance management, recognition and training.

In addition, a staffing risk analysis and Workforce Plan were completed in April 2006 to address agency critical occupation recruitment, development and/or succession.

Information Technology

Information Technology represents a major support system for BPA. It is a key to facilitating other functions and ensuring efficient processes across the agency.

Rapid growth in automation had led to a large unwieldy organization with a complex, layered, decentralized project management structure. At the onset of the efficiency initiatives, Information Technology lacked an overall vision and had multiple operating systems and hardware support functions.

Network coordination was limited. Some of the 400 individual support applications were redundant, and others were excessively customized. It was not clear that all requirements were optimally aligned with business priorities in mind. At the same time, internal client expectations were high and growing.

Even before EPIP began, Information Technology had begun re-engineering for greater consolidation and cost reduction. A goal is to make Information Technology more agile and responsive to advance BPA's business strategy. The EPIP team is pursuing improvements in six specific areas:

- Application consolidation
- Client services process improvement, including outsourcing
- Decision process simplification and improvement
- Budget and contract management
- Hardware consolidation
- Skills assessment, training and knowledge transfer

Information Technology has set a goal to reduce both its expense and capital budgets by 25 percent. Among expected EPIP changes: a single decision-making body to prioritize and make investment recommendations, a single project management office to oversee and manage projects, effective risk management by establishing internal processes and controls, and enhanced security and simplification of the Information Technology structure.

The Information Technology EPIP team also is tackling the issue of dependence on contractors and the need for deeper BPA "bench" strength. By the end of 2006, EPIP results showed a savings of just over $24 million in capital and expense. Client services, particularly the Help Desk and Desktop Support, have been streamlined and made more cost effective. However, much work remains.

Information Technology will facilitate other functions

As the EPIP functional reviews progressed, it became apparent that successful implementation of many of the process improvements would be at risk if the automation required to support new processes were not put in place. This is especially true for Asset Management; Transmission Operations and Maintenance; Supply Chain Services; and Transmission Plan, Design, Build. To meet this need, BPA has chartered a Cross-EPIP Data Strategy Team to address data issues across those four EPIP reviews.

Its mission is twofold: 1) to recommend process and technology improvements to provide data that are reliable, useful and readily available to manage asset costs, performance and risk; and, 2) to support and coordinate the targeted efficiencies. The team expects to define requirements and solutions in 2007 and implement them in 2008. Success in implementing these solutions will rely significantly on the success of the Information Technology EPIP in re-engineering its major functions.

Marketing and Sales

The goal of the Marketing and Sales EPIP is to deliver superior customer service and efficient, cost-effective marketing and sales processes. EPIP deliverables include common BPA decision processes, standard account planning and customer communications protocols, and clarity on and adherence to Standards of Conduct. Also, the EPIP seeks to establish a clear segregation of "front, middle and back office" duties to better manage risks.

While efficiency improvements will dictate greater standardization and, in some cases, less flexibility, this does not signal a reduction in products and services. Standardized contracts mean that products and services will be offered under similar terms and conditions.

Most importantly, this EPIP recognizes the importance of customers' direct interactions with BPA. Consistently, out of all BPA services, customers put the highest value on the service they get from BPA account executives, who provide day-to-day direct liaison between the customer and the agency. The Marketing and Sales EPIP aims to maintain and enhance this service through cross-functional customer account teams.

The EPIP team set eight objectives:

- Superior customer service
- One BPA/one voice

- Customer-focused culture
- Efficiency and cost effectiveness
- Improved contract management
- Improved succession planning
- Effective internal controls/segregation of duties
- Standards of Conduct compliance

As the Marketing and Sales team began its work, it found that BPA's decade of extreme business line separation had led to inconsistent and independently developed functions, processes and systems. Decision processes were unclear, and many manual processes were unnecessary or had redundant data entry. In short, there was no consistent "BPA way" of conducting business. Training and succession planning also were inadequate. Improved internal risk controls and contract management were needed, as were improved processes and controls for complying with Standards of Conduct.

The Marketing and Sales EPIP is focused on:

- Account management and the account executive role
- Customer contract management and administration
- Load and revenue forecasting and analysis
- Metering and billing
- Customer-focused teams
- Market and public policy strategy and product development
- Energy efficiency as a shared function

The Marketing and Sales EPIP Team is seeking to preserve the best of past practice (in particular, the relationship of account executives with their customers) while adopting some new approaches. Both power and transmission contracts will continue to be negotiated and signed through the respective Power and Transmission account executives. Power account executives will stay geographically located near their customers. However, there will be consistent, standardized account management for both business services. Customer-focused core teams will be developed with team members assigned to specific customer accounts, eliminating duplicate teams for each customer. The teams will be supported by cross-agency staff.

A number of customer support functions will be consolidated and shared. These include contract governance and administration, metering, billing, load forecasting and analysis, dispute procedures and energy efficiency. Customers have been involved in a "sounding board" role in these changes.

Savings will occur largely through FTE reductions. The governance and organizational changes were completed in September 2006.

Public Affairs

Communications and outreach was one of the first areas addressed by EPIP. Because of the relatively small staff, it is not an area with a large potential for savings, but it is an important area for assuring a clear and consistent "One BPA" voice.

A number of outreach activities that had been spread throughout the agency were consolidated under a Chief Public Affairs Officer. These functions included national relations, regional relations, tribal affairs, public involvement, media, employee communications, community relations, events management, Web design and communications support services such as writing and graphics.

The new consolidated organization is focusing on providing a single, clear and consistent voice to customers and stakeholders. Public Affairs provides communications support to executives, account executives and constituent and tribal account executives to enhance two-way communications with stakeholders and to promote regional engagement in BPA issues and decision making through streamlined public involvement processes. Public Affairs also is charged with assuring that agency messages are strategically aligned with the agency's objectives and that there is a coordinated "look and feel" in BPA communications.

The new Public Affairs office has developed service level agreements and performance contracts with agency clients to ensure communications needs are met. Staff reductions have also resulted in a leaner organization, dropping overall FTE from 73 to 55.

The reorganization is expected to save $2 million or more in annual FTE costs and about $275,000 annually in reduced use of outside contractors.

Supply Chain Services

BPA spends around $400 million annually on goods and services. The EPIP team is working to build a continuously improving supply chain system throughout the agency that assures optimum spending, inventory and infrastructure resources. Planning, forecasting, standardization and efficient processes are key to appropriately leveraged spending in a dynamic marketplace.

The team set out four major goals:

- Assure consistency and appropriateness of enterprise-wide supply chain policies and guiding principles
- Identify opportunities to reduce costs and improve process and resource efficiencies
- Develop a supply chain model that meets internal customer expectations while optimizing resources
- Construct a strategic direction plan as a high-level roadmap for achieving project goals

The Supply Chain Services team developed 77 recommendations in the following areas:

- Accounts payable
- Contracting and agency policy
- Inventory and stocking policies
- Outsourcing potential
- Strategic sourcing
- E-commerce
- Technology applications
- Supply chain organization

When fully implemented, these recommendations will significantly change the way BPA manages its supply chain processes with an emphasis on agency-wide consistency in practices and a single point of accountability for materials and services. Authorities and responsibilities will be more clearly defined, and a structured forecast of major procurements by program offices will drive the sourcing strategy. There also will be a renewed emphasis on fully using the Bonneville Enterprise System, an agencywide information system, and more aggressive application of e-commerce techniques that take advantage of the electronic marketplace to reduce transaction costs. Inventory will be centrally managed on a systemwide basis "so we know what we have and where it is."

Implementing the Supply Chain Services EPIP recommendations is expected to result in more efficient process, reduced labor costs, and more efficient inventory management practices, all of which will result in savings that will reduce the cost of acquiring goods and services.

Transmission Operations and Maintenance

Safe and reliable transmission requires optimal operation and maintenance of numerous facilities and physical assets ranging from substations and power lines to equipment. Since tracking and availability of equipment and materials are critical, the Transmission Operations and Maintenance EPIP team coordinated closely with the Transmission Plan Design Build, Asset Management and Supply Chain Services EPIP teams.

The goal of the Transmission Operations and Maintenance EPIP is to optimize operations and maintenance while assuring safe and reliable operation of the system. The team addressed six challenges:

- Effectively responding to an aging work force (up to two-thirds of nonsupervisory craft employees are currently eligible to retire)
- Developing a systemwide coordinated allocation of maintenance resources
- Providing better data management and reporting to facilitate data-driven decision making
- Improving the availability and reliability of transmission capacity
- Responding efficiently to increased regulatory oversight
- Facilitating sustainable cost controls

The EPIP team is about to begin initial steps to implement the proposed redesign of Transmission Field Services' processes and organization. Currently, the Transmission O&M function is structured into seven regions, which have different work methods, resources and prioritization criteria. An overall outcome will be an organization that has a system-wide perspective, can share resources more efficiently and can react more quickly to change without jeopardizing safety and system reliability.

Examples of other expected improvements include establishing specialty teams, pooling equipment and major tools for better coordination and reduced inventories, reducing backlog of maintenance projects, creating a comprehensive framework for data collection and management through the Asset Management program, and creating a more structured and coordinated process to assure maintenance work is done in a timely manner and in the most efficient and effective means possible.

Transmission Plan, Design, Build

Given the size of BPA's Transmission construction projects, the difference between standardized designs versus customized designs can run into millions of dollars. This is just one example of the importance of the Plan, Design, Build EPIP work. The EPIP team is working to develop efficient, effective and repeatable processes that will lead to stable capital work plans and better inventory recommendations. The team's 139 recommendations fall in four broad categories:

- Applying standards throughout all Plan, Design, Build functions
- Conducting work in the right order to enhance performance
- Leveling workload through better planning and scheduling procedures
- Intensifying use of risk management in a formal asset management program

At the end of fiscal year 2006, the Plan, Design, Build team was making substantial progress in:

- Moving from a one-year to a two-year capital work plan that will help avoid the boom-and-bust workload seasons in the typical one-year cycle
- Consolidating all system planning engineers at Ross Complex in Vancouver, Wash., to streamline workflow and facilitate cross training
- Establishing a developmental training program within Transmission Services
- Bringing project managers into the planning process early
- Establishing and using formal comprehensive risk templates for new projects
- Establishing a Standards Group
- Eliminating overlap between the Geographical Information System and Geomatics (systems that gather, store and process geographic or spatial data)
- Improving employee access to project information

The team is working in concert with other EPIPs, especially Supply Chain Services, Asset Management and Transmission Operations and Maintenance.

The 2007 work will focus on setting standards for the processes used in work planning and scheduling and project management. Overall, this EPIP is expected to capture capital cost savings of roughly 15 percent a year in the transmission capital program. Out of a transmission capital program of about $200 million a year, ongoing annual savings are expected to reach $30 million once the EPIP recommendations are fully implemented. Due to some actions that we were able to implement immediately, we have already realized approximately $60 million in capital savings.